

<b>TANK TYPE</b> Diaphragm	<b>MOUNT</b> Lugs, 3	<b>LOCATION</b> Girth
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This is a 22-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the sphere mid-plane. Mounting is accomplished by three (3) lugs parallel with and adjacent to the sphere mid-plane.

**Part Number 80409-1**

**SIZE: 22.14-inch ID Sphere**  
**SIZE: 562-mm**

**ISO 9001 & AS 9100 REGISTERED**

<b>APPLICABLE DOCUMENTS</b>		<b>TANK CHARACTERISTICS</b>		<b>ACCEPTANCE TESTS</b>	
Acceptance Test Procedure	50-000534	Operating Pressure, psig	475	Total Volume, ci	5,555
Cleaning	CPP 3867	Proof Pressure, psig	795	Prop Volume, ci	4,754
<b>DIAPHRAGM INFORMATION</b>		Cryo Proof, psig	NA	Max Design Wt, lbs	21.00
Diaphragm P/N	80-263027-1	Burst Pressure, psig	950	Minimum Wall, inch	0.030
Diaphragm Mold P/N	T-1868	<b>TANK CHARACTERISTICS (Metrics)</b>			
Diaphragm Gross Wt	7.6 lbs	Operating Pressure, Bar	32.75	Total Volume, l	91.03
Diaphragm Matl Type	AF-E-332	Proof Pressure, Bar	54.81	Prop Volume, l	77.91
Material Specification, Rubber	MT3-73	Cryo Proof, Bar	NA	Max Design Wt, Kg	10.98
Diaphragm Processing Note 2	90-000094	Burst Pressure, Bar	65.50	Minimum Wall, MM	0.76
N-Ray Procedure	1002	<b>FORGINGS</b>			
<b>Notes:</b>		<b>FORGINGS P/N</b>	<b>SUPPLIER</b>	<b>Die No</b>	<b>QUALIFICATION TESTS</b>
1: Lockheed Martin Spec 55-02461		80-203061-1			Qual by 80298-1
2: Proprietary Document		<b>RING FORGING</b>	<b>RING SIZE, (Rough Machined)</b>		
3: Tube Protector SK 1135 & SK 1136		80-298063-1	25.81 +.09 x 22.38 -.09 ID x .71 +.06 LG		
4: Fracture Critical		<b>TUBE TYPE AND SIZE</b>			
		<b>TRANSITION</b>		<b>SIZE</b>	
		80-409001-1		.375 OD x .028 Wall	
		80-409001-3		.375 OD x .028 Wall	
				9.525 x .711 mm	

SKETCH NOT TO SCALE

